



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

Central Regional Office • 627 Main Street, Worcester MA 01608 • 508-792-7650

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### INDIVIDUAL GROUNDWATER DISCHARGE PERMIT

Name and Address of Applicant: Pulte Homes of New England, LLC  
115 Flanders Road, Suite 200  
Westborough, MA 01581

Date of Application: April 2, 2012

Application/Permit No. 928-0

Date of Issuance: October 22, 2012

Date of Expiration: October 22, 2017

Effective Date: October 22, 2012


### AUTHORITY FOR ISSUANCE

Pursuant to authority granted by Chapter 21, Sections 26-53 of the Massachusetts General Laws, as amended, 314 CMR 2.00, and 314 CMR 5.00, the Massachusetts Department of Environmental Protection (the Department or MassDEP) hereby issues the following permit to: Pulte Homes of New England, LLC (hereinafter called "the permittee") authorizing discharges to the ground from the on site wastewater treatment facility located on Skyline Drive in Acton, Massachusetts. The development project known as the Residences at Quail Ridge will be developed in two Phases (Phase 1 and Phase 2, respectively). Phase 1 shall consist of development of age restricted residential and existing commercial facilities as described in Table 1-1 attached herein (Appendix A) and shall not exceed a maximum design flow of 7,465 gallons per day (gpd). Phase 2 shall consist of development of additional age-restricted residential facilities as described in Table 1-1 for a design flow of 27,510 gpd per day with a total combined design flow of 34,975 gpd such authorization being expressly conditional on compliance by the permittee with all terms and conditions of the permit hereinafter set forth.

The design and installation of the wastewater treatment facility and the sewer collection and conveyance system as shown on the plans prepared by SS Designs consisting of twenty-two (22) sheets titled "Groundwater Discharge for Residences at Quail Ridge and Quail Ridge Country

Club, Skyline Drive, Acton, MA" dated February 20, 2012, with sheets 2, 13, 15, 19, 20 & 22 last revised July 12, 2012, sheets 1, 11, 14, 16-18 revised July 28, 2012, and Site Plans prepared by Bohler Engineering consisting of thirteen (13) sheets, Sheets No.'s 19-29, 33 & 34 dated 5/23/2011 with sheets 19, 20, 22, 24, 28 & 29 last revised 1/19/2012, sheets 21, 23, 25, 26 and 27 last revised 6/18/2012, Sheet 33 last revised 2/15/2012 and Sheet 34 last revised 7/10/2012 are approved and shall be regulated under the terms of this groundwater discharge permit.

  
[Signature & Title]

  
[Date]

## I. SPECIAL CONDITIONS

### A. **Effluent Limits**

#### **Phase 1:**

##### Effluent Characteristics

##### Discharge Limitations

Flow

7,465 gallons per day\*

\* Phase 1 discharge shall consist of septic tank effluent to the existing soil absorption system as described in the approved hydrogeologic report for flows generated as described in Table 1-1. Development under Phase I is limited to a total design flow of 7,465 gpd.

#### **Phase 2:**

Prior to when either (1) the total design flow of the complex exceeds 7,465 gallons per day or (2) the initial 5-year permit cycle expires, whichever comes first, the permittee shall complete construction and commence operation of the approved wastewater treatment facility, and provide full treatment of all wastewater generated at the complex. Within sixty (60) days of facility startup and continuing thereafter the permittee shall not exceed the following effluent characteristics:

##### Effluent Characteristics

##### Discharge Limitations

Flow

34,975 gallons per day

Biochemical Oxygen Demand, (BOD<sub>5</sub>)

30 mg/l

Total Suspended Solids (TSS)

30 mg/l

Oil and Grease

15 mg/l

Total Nitrogen (TKN+NO<sub>3</sub>+NO<sub>2</sub>)

10 mg/l

Nitrate-Nitrogen

10 mg/l

Fecal Coliform

200 org/100 ml

- a) The pH of the effluent shall not be less than 6.5 nor greater than 8.5 standard units at any time or not more than 0.2 standard units outside the naturally occurring range.
- b) The discharge of the effluent shall not result in any demonstrable adverse effect on the groundwater or violate any water quality standards that have been promulgated.
- c) The monthly average concentration of BOD<sub>5</sub> and TSS in the discharge shall not exceed 15 percent of the monthly average concentrations of BOD and TSS in the influent into the permittee's wastewater treatment facility.

- d) When the average annual flow exceeds 80 percent of the permitted flow limitations, the permittee shall submit a report to the Department describing what steps the permittee will take in order to remain in compliance with the permit limitations and conditions, inclusive of the flow limitations established in this permit.

## B. Monitoring and Reporting

- 1) The permittee shall monitor and record the quality of the influent and the quality and quantity of the effluent prior to discharge to the leaching facilities according to the following schedule and other provisions:

### Phase 1:

#### EFFLUENT:

<u>Parameter</u>	<u>Minimum Frequency of Analysis</u>	<u>Sample Type</u>
Flow	Monthly*	Avg.

\* During this phase the permittee shall report daily flow based on water meter records in the following manner. Each month the permittee shall total the actual water meter recorded flows for the complex measured in gallons, and then calculate the average daily flow for that month in gallons per day by dividing the total water usage by the number of days in that month.

When the total design flow of the complex exceeds 7,465 gallons per day or when the first 5-year permit cycle expires, whichever comes first, the permittee is required to comply with the more stringent monitoring requirements for influent and effluent monitoring listed below.

#### INFLUENT:

<u>Parameter</u>	<u>Minimum Frequency of Analysis</u>	<u>Sample Type</u>
BOD <sub>5</sub>	Weekly	24-hour composite
TSS	Weekly	24-hour composite
pH	Daily	Grab
Ammonia-Nitrogen	Weekly	24-hour composite
Total Nitrogen (TKN+NO <sub>3</sub> +NO <sub>2</sub> )	Weekly	24-hour composite

**Phase 2:**

**EFFLUENT:**

<u>Parameter</u>	<u>Minimum Frequency of Analysis</u>	<u>Sample Type</u>
Flow	Daily	Max., Min. Avg.
BOD <sub>5</sub>	Weekly	24-hour composite
TSS	Weekly	24-hour composite
pH	Daily	Grab
Nitrate-Nitrogen	Weekly	24-hour composite
Ammonia-Nitrogen	Weekly	24-hour composite
Total Nitrogen	Weekly	24-hour composite
Total Phosphorus *	Monthly	24-hour composite
Orthophosphate *	Monthly	24-hour composite
Oil and Grease	Monthly	24-hour composite
Fecal Coliform	2 x Week	24-hour composite
Turbidity	Continuous	Continuous
Volatile Organic Compounds USEPA Method #624	Annually	Grab
Ultraviolet disinfection intensity	Daily	Reading

\* After one full year of monitoring the Total Phosphorus and Orthophosphate results, the Department may determine, upon the request of the permittee, that the frequency of monitoring may be reduced if, in the judgment of the Department, the results of the sampling indicate that existing phosphorus levels will not adversely impact downgradient receptors. If the Department reduces the frequency of monitoring for Total Phosphorus and Orthophosphate, the Department reserves the right to resume more frequent monitoring if the Department determines that phosphorus levels are impacting downgradient receptors.

- 2) Subject to the phasing described above, at least ninety (90) days prior to the discharge from Phase 1 the permittee shall install the permanent groundwater monitoring network consisting of the following monitoring wells: upgradient monitoring well NGI-3 and down gradient monitoring wells NGI-105 and NGI-106.

At least ninety (90) days prior to the start-up of the wastewater treatment facility, the permittee shall install the permanent groundwater monitoring network consisting of the following monitoring wells: upgradient monitoring well NGI-101 and downgradient monitoring wells NGI-102, NGI-103, and NGI-104.

The monitoring wells are referenced within the approved report titled: "Addendum No. 1 to the Hydrogeologic Report, Major Groundwater Discharge Permit Application, Quail Ridge Country Club, Acton, Massachusetts" prepared by Northeast Geoscience, Inc. dated December 2011. A copy of the monitoring well network site plan is attached to this permit as Appendix B titled: "Proposed Monitoring Network, Quail Ridge Country Club

354B Great Road, Acton, Massachusetts” dated 1/2012. The permittee shall affix labels to the steel protective casing of each monitoring well with the identification number assigned in the approved plan.

The permittee shall monitor, record and report the quality of groundwater in each of the approved monitoring wells stated above according to the following schedule and other provisions:

<u>Parameter</u>	<u>Minimum Frequency of Analysis</u>
pH	1 x Monthly
Specific Conductance	1 x Monthly
Static Water Level*	1 x Monthly
Nitrate-Nitrogen	1 x Quarterly
Total Nitrogen	1 x Quarterly
Total Phosphorus**	1 x Quarterly
Orthophosphate**	1 x Quarterly
Volatile Organic Compounds USEPA Method #624	1 x Annually

\* Static Water Level shall be expressed as an elevation and shall be referenced to the surveyed datum established for the site. It shall be calculated by subtracting the depth to the water table from the surveyed elevation of the top of the monitoring well's PVC well casing/riser.

\*\* After one full year of quarterly monitoring the Total Phosphorus and Orthophosphate levels in the permanent Phase 2 monitoring well network, the permittee may request that the Department reduce the monitoring frequency, if in the judgment of the Department; the results of the sampling indicate that existing phosphorus levels will not adversely impact downgradient receptors. Should the Department reduce the frequency of permit monitoring for Total Phosphorus and Orthophosphate, the Department reserves the right to direct the permittee to resume more frequent monitoring if the Department determines that phosphorus levels are impacting downgradient receptors.

- 3) Any grab sample or composite sample required to be taken less frequently than daily shall be taken during the period of Monday through Friday inclusive. All composite samples shall be taken over the operating day.

The permittee shall submit all monitoring reports to the Department within thirty (30) days of the last day of the reporting month. Reports shall be on an acceptable form, properly completed and signed and shall be sent to: the Deputy Regional Director, Bureau of Resource Protection, MassDEP Central Regional Office, 627 Main Street, Worcester, MA 01608, and to MassDEP, Wastewater Management Program, One Winter Street/5th Floor, Boston, MA 02108, and to the Acton Board of Health, 472 Main Street, Acton, MA 01720.

Submission of monitoring reports in electronic format is available through eDEP and serves as data submission to both the Regional and Boston offices. To register for electronic submission go to: <http://www.mass.gov/dep/service/compliance/edeponlf.htm>

### C. Financial Assurance Mechanisms

- (1)
  - a) The permittee shall establish and maintain a financial assurance mechanism that provides for the continued availability of an immediate repair and replacement account to be used by the permittee solely for the immediate repair and replacement of any failing components of the PWTF. To create an immediate repair and replacement account, the permittee shall deposit at least 15% of the estimated construction cost of the PWTF into an interest bearing escrow account in accordance with the financial assurance mechanism and 314 CMR 5.15.
  - b) The permittee shall also establish and maintain a financial assurance mechanism in accordance with 314 CMR 5.15 that provides for the accumulation in a capital reserve account of sufficient funds to make any necessary modifications to the PWTF and other related equipment within twenty years from the date the PWTF commenced operation or such other period determined to be appropriate by the Department based on the age and condition of the PWTF. The financial assurance mechanism shall provide for the accumulation in the capital reserve account of an amount equal to at least 25% of the estimated construction cost of the PWTF.
  - c) On or before January 31<sup>st</sup> of each year, the permittee shall submit an annual financial report identifying the initial and current balances in the immediate repair and replacement account and the capital reserve account and confirming the continuing availability of the funds in said account for the purposes specified in the permit and 314 CMR 5.15. Said report shall be prepared in accordance with generally accepted accounting principles. Reports pertaining to the required financial assurance mechanism(s) shall be sent to the Wastewater Management Section Chief at the appropriate Regional Office
- (2) The permittee shall meet the obligation to establish all required financial assurance mechanisms by using Department-approved forms for these documents and shall submit said these documents to the Department for its review and approval as follows:
  - a) A permittee shall submit the financial assurance mechanism(s) to the Department for its review and approval no later than ninety (90) days prior to the start-up of the treatment facility. The permittee shall not operate the facility unless and until the Department has approved the required financial assurance mechanism(s), the financial assurance mechanisms are in full force and effect, and the permittee has made all contributions required thirty (30) days prior to the start-up of the facility.
  - b) A permittee with a wastewater treatment facility in existence prior to the submission of the individual permit renewal application may submit the financial

assurance mechanisms to the Department for its review and approval no later than ninety (90) days from the date of submission of the individual permit renewal application. Said permittee shall be in compliance with the provision of each approved financial assurance mechanism requiring contributions to the immediate repair and replacement account and the capital reserve account no later than thirty (30) days prior to the date on which the renewal is issued.

- (3) The permittee shall maintain the current form documents evidencing all required financial assurance mechanisms approved by the Department. The permittee shall perform all its obligations under the required financial assurance mechanisms as approved by the Department.
- (4) For purpose of establishing the financial assurance mechanism, the estimated construction cost of the wastewater treatment facility shall include the cost of constructing the wastewater treatment plant, collection system, and associated mechanical equipment, but not including the cost of the land, ground and wastewater effluent disposal area.

#### **D. Supplemental Conditions**

- 1) Phase 1 development (see Table 1-1) is limited to the development specified in Table 1-1 in Appendix A. The permittee is required to complete construction of all components of the wastewater treatment facility in order to treat the ultimate design flow of 34,975 gpd (including disposal areas) prior to commencement of construction beyond Phase 1 as described in Table 1-1.
- 2) The permittee shall monitor the downgradient side of the retaining wall along the 7,465 gpd soil absorption system for any evidence of emergent groundwater on a monthly basis. The permittee shall record the results of the investigation in the monthly monitoring report submittals.
- 3) Pulte intends to create a condominium and convey this property to the condominium trust. When this occurs, Pulte must apply for a permit transfer. At the time of the permit transfer, the Department will require review of the condominium documents to ensure that ownership and control of the wastewater treatment facility is correctly established. The permittee shall notify the Department at least thirty (30) days in advance of the proposed transfer of ownership of the facility for which this permit is written. Said notification shall include a written agreement between the existing and new permittees containing a specific date for transfer of permit, responsibility, coverage and liability between them.
- 4) A staffing plan for the facility shall be submitted to the Department prior to start-up and again every two years and whenever there are staffing changes. The staffing plan shall include the following components:
  - a) The operator(s)'s name(s), operator grade(s) and operator license number(s);
  - b) The number of operation days per week;
  - c) The number of operational shifts per week;
  - d) The number of shifts per day;



- e) The required personnel per shift;
  - f) Saturday, Sunday and holiday staff coverage;
  - g) Emergency operating personnel.
- 5) The permittee is responsible for the operation and maintenance of all sewers (i.e. the collection system), pump stations, grinder pumps, and treatment units for the permitted facility and throughout the development project, which shall be operated and maintained under the direction of a properly certified wastewater operator.
- 6) Operation and maintenance of the proposed facility must be in accordance with 314 CMR 12.00, "Operation and Maintenance and Pretreatment Standards for Wastewater Treatment Works and Indirect Discharges", and, 257 CMR 2.00, "Rules and Regulations for Certification of Operators of Wastewater Treatment Facilities".
- a) The facility has been rated (in accordance with 257 CMR 2.00), to be a Grade 4 facility. Therefore, the permittee shall provide for oversight by a Massachusetts Certified Wastewater Treatment plant operator (Chief Operator) Grade 4 or higher. The permittee will also provide for a backup operator who shall possess at least a valid Grade 4 license.
  - b) The date and time of the operator's inspection along with the operator's name and certification shall be recorded in the log book on location at the treatment facility. All daily inspection logs consistent with the O&M Manual requirements shall be kept at the facility for a period of three (3) years.
  - c) Records of operation of wastewater treatment facilities or disposal systems required by the Department shall be submitted on forms supplied by the Department or on other forms approved by the Department for such use. Monthly reports shall be certified by the wastewater treatment plant operator in charge and shall be included in the discharge monitoring reports submitted each month.
- 7) If the operation and maintenance of the facility is to be contracted to a private concern, the permittee shall submit a copy of the contract, consistent with what is required by the approved Operation & Maintenance manual and signed only by the contractor, to the appropriate MassDEP Regional Office for review and approval ninety (90) days prior to the start up of the facility. Along with the contract, a detailed listing of all contract operation obligations of the proposed contractor at other facilities shall also be submitted. The permittee shall not begin operation of the treatment facility until the Department approves the contract.
- 8) Any additional connections to the sewer system, beyond the proposed facility description on Page 1 shall be approved by MassDEP and the local Board of Health prior to the connection. The permittee is responsible for the operation and maintenance of the conveyance system to connect facilities to the WWTF as described above.
- 9) All tests or analytical determinations to determine compliance with permit standards and requirements shall be done using tests and procedures found in the most recent version of

*Standard Methods for the Examination of Water and Wastewater* and shall be performed by a Massachusetts Certified laboratory.

- 10) The permittee shall notify the appropriate MassDEP Regional Office, in writing, within thirty (30) days of the following events:
  - a) The date of treatment plant start up.
  - b) Any interruption of the treatment system operation, other than routine maintenance.
  - c) Final shutdown of the treatment system.
- 11) The permittee shall contract to have any and all solids and sludges generated by the treatment system for which this permit is issued removed off site by a properly licensed waste hauler for disposal at an EPA/MassDEP approved facility. The name and license number of the hauler along with the quantity of wastes removed and the date(s) of removal shall be reported by the permittee in writing to the appropriate MassDEP Regional Office.
- 12) The permittee shall require any facility generating FOG (fats, oils, grease) connecting to the WWTF to install a compliant grease trap permitted through the local regulatory authority.
- 13) Simultaneously with the permit renewal application at year fifteen (year 2026) following the initiation of plant operations, the permittee shall submit two reports to the Department for its review and approval:
  - a. An engineering report, prepared by a registered professional engineer, that outlines in sufficient detail what modifications (if any) to the facility or other changes are required to insure that the facility can remain in compliance with its GWDP and other applicable requirements through the next 5 year permit term (year 2031) and beyond; and
  - b. A financial plan that contains the cost estimates for implementing the facility modifications or other changes identified in the engineering report, and describes and demonstrates, how and when the permittee will finance the needed facility modifications or other changes.
- 14) In the event that effluent limits are not met, or the discharge is determined to impair groundwater quality in accordance with 314 CMR 5.16(1), the permittee may be obligated to modify, supplement or replace the permitted treatment process so as to ensure that the discharge does not impair the ability of the groundwater to act as an actual or potential source of potable water.

### **E. Appeal Rights**

During the thirty (30) day period following issuance of this permit, a Notice of Claim for an Adjudicatory Appeal may be sent by any person aggrieved (the "Petitioner") by the issuance to:

Case Administrator  
Office of Appeals and Dispute Resolution  
Department of Environmental Protection  
One Winter Street/2<sup>nd</sup> Floor  
Boston, MA 02108

310 CMR 1.01(6)(b) requires the Notice of Claim to: include sufficient facts to demonstrate aggrieved person status; state the facts which are grounds for the appeal specifically, clearly and concisely; and, state relief sought. The permit shall become or remain effective at the end of the 30 day appeal period unless the person filing the Notice of Claim requests, and is granted, a stay of its terms and conditions. If a permit is modified under 314 CMR 2.10, only the modified terms and conditions may be subject to an Adjudicatory Appeal. All other aspects of the existing permit shall remain in effect during any such Adjudicatory Appeal.

Per 310 CMR 4.06, the hearing request to the Commonwealth will be dismissed if the filing fee is not paid. Unless the Petitioner is exempt or granted a waiver, a valid check payable to the Commonwealth to Massachusetts in the amount of \$100.00 must be mailed to:

Commonwealth of Massachusetts  
Department of Environmental Protection  
P.O. Box 4062  
Boston, MA 02211

The filing fee is not required if the Petitioner is a city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority effective January 14, 1994, or any municipal housing authority; or, per MGL 161A s. 24, the Massachusetts Bay Transportation Authority. The Department may waive the adjudicatory hearing filing fee for a Petitioner who shows that paying the fee will create an undue financial hardship. A Petitioner seeking a waiver must file, along with the hearing request, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

## II. GENERAL PERMIT CONDITIONS

The following conditions from 314 CMR 5.16 apply to all individual and general permits:

(1) No discharge authorized in the permit shall cause or contribute to a violation of the Massachusetts Surface Water Quality Standards (314 CMR 4.00) or any amendments thereto. Upon promulgation of any amended standard, this permit may be revised or amended in accordance with such standard and 314 CMR 2.10 and 3.13 or 5.12. Except as otherwise provided in 314 CMR 5.10 (3)(c), 310 CMR 5.10(4)(a)2 and 314 CMR 5.10(9), no discharge authorized in the permit shall impair the ability of the ground water to act as an actual or potential source of potable water. Evidence that a discharge impairs the ability of the ground water to act as an actual or potential source of potable water includes, without limitation, analysis of samples taken in a downgradient well that shows one or more exceedances of the applicable water quality based effluent limitations set forth in 314 CMR 5.10. In those cases where it is shown that a measured parameter exceeds the applicable water quality based effluent limitations set forth in 314 CMR 5.10 at the upgradient monitoring well, evidence that a discharge impairs the ability of the ground water to act as an actual or potential source of potable water is deemed to exist if a measured parameter in any downgradient well exceeds the level of that same measured parameter in the upgradient well for the same sampling period. . A statistical procedure approved by the Department shall be used in determining when a measured parameter exceeds the allowable level.

(2) Duty to comply. The permittee shall comply at all times with the terms and conditions of the permit, 314 CMR 5.00, M.G.L. c. 21, §§ 26 through 53 and all applicable state and federal statutes and regulations.

(3) Standards and prohibitions for toxic pollutants. The permittee shall comply with effluent standards or prohibitions established under § 307(a) of the Federal Act, 33 U.S.C § 1317(a), for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

(4) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and equipment installed or used to achieve compliance with the terms and conditions of the permit, and the regulations promulgated at 314 CMR 12.00 entitled "Operation and Maintenance and Pretreatment Standards for Wastewater Treatment Works and Indirect Discharges, and 257 CMR 2.00, Rules and Regulations for Certification of Operators of Wastewater Treatment Facilities".

(5) Duty to halt or reduce activity. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or discharges or both until the facility is restored or an alternative method of treatment is provided. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

(6) Power Failure. In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- (a) provide an alternative power source sufficient to operate the wastewater control facilities; or
- (b) halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

(7) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any adverse impact on human health or the environment resulting from non-compliance with the permit.

(8) Duty to provide information. The permittee shall furnish to the Department within a reasonable time as specified by the Department any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine whether the permittee is complying with the terms and conditions of the permit.

(9) Inspection and entry. The permittee shall allow the Department or its authorized representatives to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records required by the permit are kept;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (c) Inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit; and
- (d) Sample or monitor at reasonable times for the purpose of determining compliance with the terms and conditions of the permit.

(9A) The permittee shall physically secure the treatment works and monitoring wells and limit access to the treatment works and monitoring wells to those personnel required to operate, inspect and maintain the treatment works and to collect samples.

(9B) The permittee shall identify each monitoring well by permanently affixing to the steel protective casing of the well a tag with the identification number listed in the permit.

(10) Monitoring. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless other test procedures are specified in the permit.

(11) Recordkeeping. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and all records of all data used to complete the application for the permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time. Records of monitoring information shall include:

- (a) The date, exact place, and time of sampling or measurements;
- (b) The individual(s) who performed the sampling or measurement;
- (c) The date(s) analyses were performed;
- (d) The individual(s) who performed the analyses;
- (e) The analytical techniques or methods used; and
- (f) The results of such analyses.

(12) Prohibition of bypassing. Except as provided in 314 CMR 5.16(13), bypassing is prohibited, and the Department may take enforcement action against a permittee for bypassing unless:

- (a) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- (c) The permittee submitted notice of the bypass to the Department:
  - 1. In the event of an anticipated bypass, at least ten days in advance, if possible; or
  - 2. In the event of an unanticipated bypass, as soon as the permittee has knowledge of the bypass and no later than 24 hours after its first occurrence.

(13) Bypass not exceeding limitations. The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if necessary for the performance of essential maintenance or to assure efficient operation of treatment facilities.

(14) Permit actions. The permit may be modified, suspended, or revoked for cause. The filing of a request by the permittee for a permit modification, reissuance, or termination, or a notification of planned changes or anticipated non-compliance does not stay any permit condition.

(15) Duty to reapply. If the permittee wishes to continue an activity regulated by the permit after the expiration date of the permit, the permittee must apply for and obtain a new permit. The permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department in writing.

(16) Property rights. The permit does not convey any property rights of any sort or any exclusive privilege.

(17) Other laws. The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, nor does it relieve the permittee of its obligation to comply with any other applicable Federal, State, and local laws and regulations.

(18) Oil and hazardous substance liability. Nothing in the permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of the Federal Act, 33 U.S.C. § 1321, and M.G.L. c. 21E.

(19) Removed substances. Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed in a manner consistent with applicable Federal and State laws and regulations including, but not limited to, the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53 and the Federal Act, 33 U.S.C. § 1251 *et seq.*, the Massachusetts Hazardous Waste Management Act, M.G.L. c. 21C, and the Federal Resource Conservation and Recovery Act, 42 U.S.C. § 6901, *et seq.*, 310 CMR 19.000 and 30.000, and other applicable regulations.

(20) Reporting requirements.

(a) Monitoring reports. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) at the intervals specified elsewhere in the permit. If the permittee monitors any pollutant more frequently than required by the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

(b) Compliance schedules. Reports of compliance or non-compliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date.

(c) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility or activity which could significantly change the nature or increase the quantity of pollutants discharged. Unless and until the permit is modified, any new or increased discharge in excess of permit limits or not specifically authorized by the permit constitutes a violation.

(d) Anticipated non-compliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in non-compliance with permit requirements.

(e) 24 hour reporting. The permittee shall report any non-compliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance. The following shall be included as information which must be reported within 24 hours:

1. **Any unanticipated bypass which exceeds any effluent limitation in the permit.**
2. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

(f) Other non-compliance. The permittee shall report all instances of non-compliance not reported under 314 CMR 5.16(20)(a), (b), or (e) at the time monitoring reports are submitted. The reports shall contain the information listed in 314 CMR 5.16(20)(e).

(g) Toxics. All manufacturing, commercial, mining, or silvicultural dischargers must notify the Department as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant listed in 314 CMR 3.17 which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
  - a. 100 micrograms per liter (100 ug/l);

b. 200 micrograms per liter (200 ug/l) for acrolein and acrylonitrile; 500 micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

c. Five times the maximum concentration value reported for that pollutant in the permit application; or

2. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

(h) Indirect dischargers. All Publicly Owned Treatment Works shall provide adequate notice to the Department of the following:

1. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to § 301 or 306 of the Federal Act, 33 U.S.C. § 1311 or 1316, if it were directly discharging those pollutants; and

2. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

(i) Information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

(21) Signatory requirement. All applications, reports, or information submitted to the Department shall be signed and certified in accordance with 314 CMR 3.15 and 5.14.

(22) Severability. The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

(23) Reopener clause. The Department reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53 or the Federal Act, 33 U.S.C. § 1251 *et seq* in order to bring all discharges into compliance with said statutes.

(24) Approval of treatment works. All discharges and associated treatment works authorized herein shall be consistent with the terms and conditions of this permit. Any modification to the approved treatment works shall require written approval of the Department prior to the construction of the modification.

(25) Transfer of Permits.

(a) RCRA facilities. Any permit which authorizes the operation of a RCRA facility which is subject to the requirements of 314 CMR 8.07 shall be valid only for the person to whom it is issued and may not be transferred.

(b) Transfers by modification. Except as provided in 314 CMR 5.16(25)(a) and (c), a permit may be transferred by the permittee to a new owner or operator provided that the permit has been modified or revoked and reissued or a minor modification is made to



identify the new permittee in accordance with 314 CMR 5.12(3) and (4).

(c) Automatic transfers. For facilities other than Privately Owned Wastewater Treatment Facilities (PWTFs) that treat at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities, PWTFs that have been required to establish financial assurance mechanism(s) pursuant to 314 CMR 5.15(6), and RCRA facilities subject to the requirements of 314 CMR 8.07, a permit may be automatically transferred in accordance with 314 CMR 5.12(5).

(26) Permit Compliance Fees and Inspection Information. Except as otherwise provided, any permittee required to obtain a surface water or ground water discharge permit pursuant to M.G.L. c. 21, § 43 and 314 CMR 3.00 and 5.00, shall be required to submit the annual compliance assurance fee established in accordance with M.G.L. c. 21A, § 18 and 310 CMR 4.00 as provided in 314 CMR 2.12. The requirement to submit the annual compliance fee does not apply to any local government unit other than an authority. Any permittee required to obtain a surface water or ground water discharge permit pursuant to M.G.L. c. 21, §43 and 314 CMR 3.00 and 5.00 may be required to submit inspection information annually as a condition of the permit as provided in 314 CMR 2.12.

## Appendix A

Table 1-1

Phase 1:	Club Office (existing)	90	gpd
	Retail (existing)	75	gpd
	4 tennis courts (existing)	1,000	gpd
	Pool (existing)	300	gpd
	32 lockers (existing)	640	gpd
	Maintenance building (existing)	180	gpd
	Snack shop (existing)	200	gpd
	(6) 3-bedroom residential (proposed)	1,980	gpd
	(20) 2-bedroom residential (proposed)	3,000	gpd
	<u>Subtotal</u>	<u>7,465</u>	<u>gpd</u>
Phase 2	(47) 3-bedroom residential (proposed)	15,510	gpd
	(80) 2-bedroom residential (proposed)	12,000	gpd
	<u>Subtotal</u>	<u>27,510</u>	<u>gpd</u>
<u>Total</u>		<u>34,975</u>	<u>gpd</u>

## Appendix B

### Groundwater Monitoring Plan

The approved groundwater monitoring well network is depicted on the attached site plan titled "Proposed Monitoring Network Quail Ridge Country Club", dated 12/16/11.

1. The monitoring well network for the Driving Range SAS shall consist of upgradient well NGI-3 and downgradient wells NGI-105 and NGI-106.
2. The monitoring network for the Restaurant SAS shall consist of upgradient well NGI-101 and downgradient wells NGI-102, NGI-103 and NGI-104.
3. All monitoring wells will be prominently labeled and the well heads secured. Should any well be compromised or damaged, the permittee shall immediately notify MassDEP and obtain approval for installation of a replacement well.